## **SP9 MOBILITY FOR VULNERABLE USERS**

## Recommendations for decision-makers

Vulnerable users such as pedestrians and cyclists are associated with sustainable modes of mobility, or in other words, alternative, non-motorized modes of mobility that cannot achieve the high speeds that are attainable by motorized modes of transportation. The alternative mobility of pedestrians and cyclists represents a clean mode of transportation that has no adverse effect on the environment. In order to foster sustainable development, these modes of transportation should be promoted. Therefore, road administrations and road network managers should adapt road infrastructures in order to make them safe and comfortable for pedestrians and cyclists. This requires taking into account the conditions under which the safety of users can be improved, by adopting and implementing policies that can guide decision-makers in terms of infrastructure and legal and service requirements, and that can help to define actions aimed at informing and educating people in order to promote sustainable modes of mobility.

Mode sharing must be analyzed from the point of view of safety and mobility. This is a crucial issue, especially in the case of developing countries, where safety and mobility needs are increasing.

It is also important for persons with impaired mobility to be able to travel under similar conditions to the general public. Accessibility should be guaranteed from the point of departure to the destination. Furthermore, developments and road signs must take into account the needs of demographic ageing.

In order to ensure sustainability, elected officials and network managers must try to preserve the quality of accessibility at all times. In relation to the costs, decision-makers must be aware that it is better and more economic to consider at the beginning of a project the needs associated to the mobility of the whole vulnerable road users.

Special attention should be paid to roadwork, where accessibility for persons with impaired mobility and for pedestrians as a whole should be maintained.

## **Technical considerations:**

Sustainable modes of mobility require quality infrastructures in order to ensure the safety and comfort of users and to improve the quality of life. The inclusion of alternative mobility in road planning requires an adequate level of expertise, and the measures taken must be adapted to the local context.

Adequate facilities for cyclists, pedestrians, older people and persons with impaired mobility are recommended. Certain types of equipment are also recommended, such as pedestrian signals and audible signals with pushbuttons and tactile coatings. New audible signal designs, where the audible signal alternates from one side of the intersection to the other, seem to

produce a better alignment of pedestrians before and during the crossing. New detection systems can control the time allocated to crossings, and can detect pedestrians waiting to cross. Devices are being developed that will guide visually impaired or wheelchair-bound persons on a route that meets their specific requirements. In the not-too-distant future, designers will need to incorporate these devices into their facilities.

## **Recommendations for PIARC**

Although the road accident record is improving in high-income countries, it is deteriorating in most developing countries. In addition, an alarming proportion of these accidents involve the most vulnerable road users, namely pedestrians, cyclists, persons with impaired mobility, and handicapped persons, or in other words, people who have no protection. The need to design road environments that are adapted to the needs of all vulnerable users is widely recognized. Furthermore, certain conditions must be met in order to improve the safety of sustainable modes of mobility. Given their mission to disseminate information concerning best practices, international road organizations and the PIARC can exercise their influence in order to ensure that vulnerable users are taken into account during the design and planning of roads. Decision-makers and designers should be guided by general principles that are based on a sustainable development philosophy, where sustainable mobility is promoted. Through its activities, the PIARC can influence the direction of reflections pertaining to this issue.